Mr. Richard R. Grigg Chief Nuclear Officer Wisconsin Electric Power Company 231 West Michigan Street, Room P379 Milwaukee, WI 53201

SUBJECT: POINT BEACH NUCLEAR PLANT, UNITS 1 AND 2 - ISSUANCE OF AMENDMENTS RE: RADIATION PROTECTION PROGRAM (TAC NOS. M97839 AND M97840)

Dear Mr. Grigg:

The Commission has issued the enclosed Amendment Nos. 182 and 186 to Facility Operating License Nos. DPR-24 and DPR-27 for the Point Beach Nuclear Plant, Units 1 and 2, respectively. The amendments consist of changes to the Technical Specifications (TS) in response to your application dated January 21, 1997, as supplemented on December 15, 1997.

These amendments update TS Section 15.6.11, "Radiation Protection Program," references to Title 10, *Code of Federal Regulations*, Part 20.

A copy of our related Safety Evaluation is also enclosed. The notice of issuance will be included in the Commission's biweekly *Federal Register* notice.

Sincerely,

ORIGINAL SIGNED BY

Linda L. Gundrum, Project Manager Project Directorate III-1 Division of Reactor Projects - III/IV Office of Nuclear Reactor Regulation

Docket Nos. 50-266 and 50-301

- Enclosures: 1. Amendment No. 182 to DPR-24
 - 2. Amendment No. 186 to DPR-27
 - 3. Safety Evaluation

cc w/encls: See next page

DISTRIBUTION: See attached page

DOCUMENT NAME: G:\WPDOCS\PTBEACH\PTB97839.AMD *See previous concurrence

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Mr. Richard R. Grigg Wisconsin Electric Power Company

CC:

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Ms. Sarah Jenkins Electric Division Public Service Commission of Wisconsin P.O. Box 7854 Madison, Wisconsin 53707-7854 Point Beach Nuclear Plant Unit Nos. 1 and 2

March 1997

DATED: <u>March 17, 1998</u>

AMENDMENT NO. 182TO FACILITY OPERATING LICENSE NO. DPR-24 - POINT BEACH UNIT 1 AMENDMENT NO. 186TO FACILITY OPERATING LICENSE NO. DPR-27 - POINT BEACH UNIT 2

Docket File (50-266, 50-301) PUBLIC PDIII-1 Reading E. Adensam (EGA1) C. Jamerson L. Gundrum OGC G. Hill (4) W. Beckner C. Miller, PERB R. Pederson, PERB R. Pederson, PERB R. Emch, PERB ACRS J. McCormick-Barger, RIII SEDB (TLH3)

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WASHINGTON, D.C. 20555-0001

WISCONSIN ELECTRIC POWER COMPANY

DOCKET NO. 50-266

POINT BEACH NUCLEAR PLANT, UNIT 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 182 License No. DPR-24

- 1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Wisconsin Electric Power Company (the licensee) dated January 21, 1997, as supplemented on December 15, 1997, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

- 2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 3.B of Facility Operating License No. DPR-24 is hereby amended to read as follows:
 - B. <u>Technical Specifications</u>

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 182, are hereby incorporated in the license. The licensee shall operate the facility in accordance with Technical Specifications.

3. This license amendment is effective immediately upon issuance. The Technical Specifications are to be implemented within 45 days from the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Linda R. Sundrum

Linda L. Gundrum, Project Manager Project Directorate III-1 Division of Reactor Projects - III/IV Office of Nuclear Reactor Regulation

Attachment: Changes to the Technical Specifications

Date of issuance: March 17, 1998



UNITED STATES

WASHINGTON, D.C. 20555-0001

WISCONSIN ELECTRIC POWER COMPANY

DOCKET NO. 50-301

POINT BEACH NUCLEAR PLANT, UNIT 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 186 License No. DPR-27

- 1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Wisconsin Electric Power Company (the licensee) dated January 21, 1997, as supplemented on December 15, 1997, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

- 2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 3.B of Facility Operating License No. DPR-27 is hereby amended to read as follows:
 - B. Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 186, are hereby incorporated in the license. The licensee shall operate the facility in accordance with Technical Specifications.

3. This license amendment is effective immediately upon issuance. The Technical Specifications are to be implemented within 45 days from the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Linda L. Lundrum

Linda L. Gundrum, Project Manager Project Directorate III-1 Division of Reactor Projects - III/IV Office of Nuclear Reactor Regulation

Attachment: Changes to the Technical Specifications

Date of issuance: March 17, 1998

ATTACHMENT TO LICENSE AMENDMENT NOS. 182 AND 186

TO FACILITY OPERATING LICENSE NOS. DPR-24 AND DPR-27

DOCKET NOS. 50-266 AND 50-301

Revise Appendix A Technical Specifications by removing the pages identified below and inserting the enclosed pages. The revised pages are identified by amendment number and contain vertical lines indicating the area of change.

REMOVE	INSERT
15.6.11-1	15.6.11-1
15.6.11-2	15.6.11-2
-	15.6.11-3

15.6.11 RADIATION PROTECTION PROGRAM

Specification

Radiological control procedures shall be written and made available to all station personnel, and shall state permissible radiation exposure levels. The radiation protection program shall meet the requirements of 10 CFR 20.

Paragraph 20.1601 - Control of Access to High Radiation Areas

As provided in paragraph 20.1601(c) of 10 CFR Part 20, the following controls shall be applied to high radiation areas in place of the controls required by paragraph 20.1601(a) and (b) of 10 CFR Part 20:

High Radiation Areas with Dose Rates Not Exceeding 1.0 rem/hour at 30 Centimeters from the Radiation Source or from Any Surface Penetrated by the Radiation;

- a. Each entryway to such an area shall be barricaded and conspicuously posted as a high radiation area. Such barricades may be opened as necessary to permit entry or exit of personnel or equipment.
- b. Access to, and activities in, each such area shall be controlled by means of Radiation Work Permit (RWP) or equivalent that includes specification of radiation dose rates in the immediate work area(s) and other appropriate radiation protection equipment and measures.
- c. Individuals qualified in radiation protection procedures (e.g., health physics technicians) and personnel continuously escorted by such individuals may be exempted from the requirement for an RWP or equivalent while performing their assigned duties provided that they are following plant radiation protection procedures for entry to, exit from, and work in such area.
- d. Each individual or group entering such an area shall possess:
 - 1. A radiation monitoring device that continuously displays radiation dose rates in the area; or
 - 2. A radiation monitoring device that continuously integrates the radiation dose rates in the area and alarms when the device's dose alarm setpoint is reached, with an appropriate alarm setpoint, or
 - 3. A radiation monitoring device that continuously transmits dose rate and cumulative dose to a remote receiver monitored by radiation protection personnel responsible for controlling personnel radiation exposure within the area, or

15.6.11-1

Unit 1 - Amendment No. 50, 68, 182 Unit 2 - Amendment No. 56, 73, 186

- 4. A self-reading dosimeter (e.g., pocket ionization chamber or electronic dosimeter) and,
 - Be under the surveillance, as specified in the RWP or equivalent, while in the area, of an individual qualified in radiation protection procedures, equipped with a radiation monitoring device that continuously displays radiation dose rates in the area; who is responsible for controlling personnel exposure within the area, or
 - (ii) Be under the surveillance as specified in the RWP or equivalent, while in the area, by means of closed circuit television, of personnel qualified in radiation protection procedures, responsible for controlling personnel radiation exposure in the area, and with the means to communicate with and control every individual in the area.
- e. Except for individuals qualified in radiation protection procedures, entry into such areas shall be made only after dose rates in the area have been determined and entry personnel are knowledgeable of them.

High Radiation Areas with Dose Rates Greater than 1.0 rem/hour at 30 Centimeters from the Radiation Source or from Any Surface Penetrated by the Radiation, but Less than 500 rads/hour at 1 Meter from the Radiation Source or from Any Surface Penetrated by the Radiation:

- a. Each entryway to such an area shall be conspicuously posted as a high radiation area and shall be provided with a locked door or gate that prevents unauthorized entry, and, in addition:
 - 1. All such door and gate keys shall be maintained under the administrative control of the shift supervisor, radiation protection manager, or his or her designee.
 - 2. Doors and gates shall remain locked except during periods of personnel or equipment entry or exit.
- b. Access to, and activities in, each such area shall be controlled by means of an RWP or equivalent that includes specification of radiation dose rates in the immediate work area(s) and other appropriate radiation protection equipment and measures.
- c. Individuals qualified in radiation protection procedures may be exempted from the requirement for an RWP or equivalent while performing radiation surveys in such areas provided that they are following plant radiation protection procedures for entry to, exit from, and work in such areas.

15.6.11-2

Unit 1 - Amendment No. 50, 68, 182 Unit 2 - Amendment No. 56, 73, 186

- d. Each individual or group entering such an area shall possess:
 - 1. A radiation monitoring device that continuously integrates the radiation rates in the area and alarms when the device's dose alarm setpoint is reached, with an appropriate alarm setpoint, or
 - 2. A radiation monitoring device that continuously transmits dose rate and cumulative dose information to a remote receiver monitored by radiation protection personnel responsible for controlling personnel radiation exposure within the area with the means to communicate with and control every individual in the area, or
 - 3. A self-reading dosimeter (e.g., pocket ionization chamber or electronic dosimeter) and,
 - Be under the surveillance, as specified in the RWP or equivalent, while in the area, of an individual qualified in radiation protection procedures, equipped with a radiation monitoring device that continuously displays radiation dose rates in the area; who is responsible for controlling personnel exposure within the area, or
 - (ii) Be under the surveillance as specified in the RWP or equivalent, while in the area, by means of closed circuit television, of personnel qualified in radiation protection procedures, responsible for controlling personnel radiation exposure in the area, and with the means to communicate with and control every individual in the area, or
 - 4. In those cases where options (2) and (3), above, are impractical or determined to be inconsistent with the "As Low As is Reasonably Achievable" principle, a radiation monitoring device that continuously displays radiation dose rates in the area.
- e. Except for individual qualified in radiation protection procedures, entry into such areas shall be made only after dose rates in the area have been determined and entry personnel are knowledgeable of them.
 - Such individual areas that are within a larger area that is controlled as a high radiation area, where no enclosure exists for the purpose of locking and where no enclosure can reasonably be constructed around the individual area need not be controlled by a locked door or gate, but shall be barricaded and conspicuous, clearly visible flashing light shall be activated at the area as a warning device.

15.6.11-3

Unit 1 - Amendment No. 182 Unit 2 - Amendment No. 186

f.



UNITED STATES

WASHINGTON, D.C. 20555-0001

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NOS. 182 AND 186 TO

FACILITY OPERATING LICENSE NOS. DPR-24 AND DPR-27

WISCONSIN ELECTRIC POWER COMPANY

POINT BEACH NUCLEAR PLANT, UNITS 1 AND 2

DOCKET NOS. 50-266 AND 50-301

1.0 INTRODUCTION

By letter dated January 21, 1997, as supplemented and modified on December 15, 1997, the Wisconsin Electric Power Company (the licensee) requested amendments to the Technical Specifications (TS) appended to Facility Operating Licenses Nos. DPR-24 and DPR-27 for the Point Beach Nuclear Plant, Units 1 and 2. The proposed amendments would revise TS Section 15.6.11, "Radiation Protection Program," to update references to 10 CFR Part 20, "Standards for Protection Against Radiation." Section 20.1101, "Radiation Protection Programs," requires licensees to develop and implement a radiation protection program appropriate to the scope of licensed activities and potential hazards. Section 20.2102 requires licensees to document these programs.

The December 15, 1997, supplement provided clarifying information and modified proposed language within the scope of the original application and did not change the staff's initial proposed no significant hazards considerations determination.

2.0 EVALUATION

The licensee has proposed a complete revision of TS 15.6.11. The revision specifies what constitutes high radiation areas, specifies posting, barricading, access restrictions, and monitoring required for these areas.

The current TS defines a high radiation area as having an intensity of radiation greater than 100 mrem/hr but less than 1000 mrem/hr (with measurements made at no more than 18 inches from the source of radioactivity.) The proposed TS address two categories of high radiation areas and provide specific requirements for each. The two categories are (1) high radiation areas with dose rates not exceeding 1.0 rem/hour at 30 centimeters from the radiation source or from any surface penetrated by the radiation, and (2) high radiation areas with dose rates greater than 1.0 rem/hour at 30 centimeters from the radiation source or from any surface penetrated by the radiation. The categories of radiation source or from any surface penetrated by the radiation. The categories of radiation areas are consistent with 10 CFR Part 20 requirements and are acceptable to the staff.



Current TS require each high radiation area to be conspicuously posted and the entrance thereto controlled by requiring issuance of a radiation work permit (RWP). The current TS allow health physics qualified personnel or personnel escorted by health physics personnel to be exempt from the RWP issuance requirement during the performance of their assigned radiation protection and operational surveillance duties, provided they comply with approved radiation protection procedures regarding entry into high radiation areas and radiological conditions remain stable.

The proposed TS for "High Radiation Areas with Dose Rates Not Exceeding 1.0 rem/hour at 30 Centimeters from the Radiation Source or from Any Surface Penetrated by the Radiation" requires:

- a. Each entryway to such an area shall be barricaded and conspicuously posted as a high radiation area. Such barricades may be opened as necessary to permit entry or exit of personnel or equipment.
- b. Access to, and activities in, each such area shall be controlled by means of Radiation Work Permit (RWP) or equivalent that includes specification of radiation dose rates in the immediate work area(s) and other appropriate radiation protection equipment and measures.
- c. Individuals qualified in radiation protection procedures (e.g., health physics technicians) and personnel continuously escorted by such individuals may be exempted from the requirement for an RWP or equivalent while performing their assigned duties provided that they are following plant radiation protection procedures for entry to, exit from, and work in such area.

The proposed TS for "High Radiation Areas with Dose Rates Greater than 1.0 rem/hour at 30 Centimeters from the Radiation Source or from Any Surface Penetrated by the Radiation, but Less than 500 rads/hour at 1 Meter from the Radiation Source or from Any Surface Penetrated by the Radiation" specifies the following:

- a. Each entryway to such an area shall be conspicuously posted as a high radiation area and shall be provided with a locked door or gate that prevents unauthorized entry, and, in addition:
 - 1. All such door and gate keys shall be maintained under the administrative control of the shift supervisor, radiation protection manager, or his or her designee.
 - 2. Doors and gates shall remain locked except during periods of personnel or equipment entry or exit.
- b. Access to, and activities in, each such area shall be controlled by means of an RWP or equivalent that includes specification of radiation dose rates in

the immediate work area(s) and other appropriate radiation protection equipment and measures.

c. Individuals qualified in radiation protection procedures may be exempted from the requirement for an RWP or equivalent while performing radiation surveys in such areas provided that they are following plant radiation protection procedures for entry to, exit from, and work in such areas.

An additional restriction was added for this high radiation area to specify that "Such individual areas that are within a larger area that is controlled as a high radiation area, where no enclosure exists for the purpose of locking and where no enclosure can reasonably be constructed around the individual area need not be controlled by a locked door or gate, but shall be barricaded and conspicuous, clearly visible flashing light shall be activated at the area as a warning device."

The requirements for posting, barricading, locking, and control of access to high radiation areas are clarified by use of wording suggested for plants converting to improved Standard Technical Specifications as described in an April 9, 1997, letter to the Nuclear Energy Institute (NEI) from C.I. Grimes, Chief, Technical Specifications Branch, Office of Nuclear Reactor Regulation. The revised wording is acceptable to the staff.

The current TS requires radiation monitoring for entry into a high radiation area that consists of the following:

- a. A radiation monitoring device which continuously indicates the radiation dose rate in the area.
- A radiation monitoring device which continuously integrates the radiation dose rate in the area and alarms when a preset integrated dose is received. Entry into such area with this monitoring device may be made after the dose rate level in the area has been established and personnel have been made knowledgeable of these conditions.
- c. Coverage by an individual qualified in radiation protection procedures who is equipped with a radiation dose rate monitoring device. This individual shall be responsible for providing positive control over the activities within the area and shall perform periodic radiation surveillance as specified by the plant health physics supervisor on the RWP.

The proposed TS for radiation monitoring in "High Radiation Areas with Dose Rates Not Exceeding 1.0 rem/hour at 30 Centimeters from the Radiation Source or from Any Surface Penetrated by the Radiation" requires as one alternative for each individual or group entering such an area possession of:

4. A self-reading dosimeter (e.g., pocket ionization chamber or electronic dosimeter) and, [such individual or group shall]

- (i) Be under the surveillance, as specified in the RWP or equivalent, while in the area, of an individual qualified in radiation protection procedures, equipped with a radiation monitoring device that continuously displays radiation dose rates in the area; who is responsible for controlling personnel exposure within the area, or
- (ii) Be under the surveillance as specified in the RWP or equivalent, while in the area, by means of closed circuit television, of personnel qualified in radiation protection procedures, responsible for controlling personnel radiation exposure in the area, and with the means to communicate with and control every individual in the area.

Similarly, the proposed TS for "High Radiation Areas with Dose Rates Greater than 1.0 rem/hour at 30 Centimeters from the Radiation Source or from Any Surface Penetrated by the Radiation, but Less than 500 rads/hour at 1 Meter from the Radiation Source or from Any Surface Penetrated by the Radiation" requires:

- d. Each individual or group entering such an area shall possess:
 - A radiation monitoring device that continuously integrates the radiation rates in the area and alarms when the device's dose alarm setpoint is reached, with an appropriate alarm setpoint, or
 - 2. A radiation monitoring device that continuously transmits dose rate and cumulative dose information to a remote receiver monitored by radiation protection personnel responsible for controlling personnel radiation exposure within the area with the means to communicate with and control every individual in the area, or
 - 3. A self-reading dosimeter (e.g., pocket ionization chamber or electronic dosimeter) and,
 - (i) Be under the surveillance, as specified in the RWP or equivalent, while in the area, of an individual qualified in radiation protection procedures, equipped with a radiation monitoring device that continuously displays radiation dose rates in the area; who is responsible for controlling personnel exposure within the area, or
 - (ii) Be under the surveillance as specified in the RWP or equivalent, while in the area, by means of closed circuit television, of personnel qualified in radiation protection procedures, responsible for controlling personnel radiation exposure in the area, and with the means to communicate with and control every individual in the area, or

4. In those cases where options (2) and (3), above, are impractical or determined to be inconsistent with the "As Low As is Reasonably Achievable" principle, a radiation monitoring device that continuously displays radiation dose rates in the area.

The proposed changes are consistent with the guidance provided in the April 9, 1997, letter from the NRC to NEI and are acceptable to the staff.

3.0 STATE CONSULTATION

In accordance with the Commission's regulations, the Wisconsin State official was notified of the proposed issuance of the amendments. The State official had no comments.

4.0 ENVIRONMENTAL CONSIDERATION

Pursuant to 10 CFR 51.21, 51.32, and 51.35, an environmental assessment and finding of no significant impact was prepared and published in the *Federal Register* on August 29, 1997 (62 FR 45882).

Accordingly, based upon the environmental assessment, the Commission has determined that the proposed action will not have a significant effect on the quality of the human environment.

5.0 CONCLUSION

The Commission has concluded, based on the considerations discussed above, that (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendments will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributor: L. Gundrum

Date: March 17, 1998